The length of the right mandibular ramus of Edmontosaurus (specimen

Cat. No. 2289) is 910 mm.

Dentary. (Dn.). Figures 3, 4, 20, and 21. This element is large with three-eighths of its length in front edentulous. It is deeply excavated posteriorly by the mandibular fossa and the dental magazine occupies nearly one-half the length of the bone. The coronoid process is robust and placed far back, and gives to the dentary its maximum breadth. For the full length of the magazine the bone is deep and moder-The edentulous part is comparatively thin, with a gradually lessening depth forward, and longitudinally concave internally. It curves abruptly inward in front, with a lowering of the superior border, to meet the dentary of the opposite side in a ligamentous connexion behind the predentary. The mandibular fossa excavates the coronoid process behind, and internally is continuous with the Meckelian groove which lessens in depth in its forward course near the lower border of the bone, and disappears in advance of a point in line with the front end of the magazine. Behind the magazine the dentary ends in a laterally compressed, pointed process, internal to the mandibular fossa. This process is covered on its inner face, and embraced above, by the anterior end of the splenial. Posteriorly beneath the Meckelian groove, is a narrow surface marking the internal application of the angular as far forward as a point nearly beneath the midlength of the magazine. Posteriorly below the dentary is transversely broad, thin, and obtusely pointed at its termination, underlapping the surangular so that the floor of the mandibular fossa is continuous on the upper front surface of the surangular. The narrow symphysial surface is deeply grooved from front to back. The dental foramina, corresponding in number to the vertical series of teeth, are conspicuous internally following the lower curve of the magazine. At the anterior end externally is a rather large foramen behind which are six or seven smaller ones at irregular intervals back to the front of the magazine. Still farther back are a few other foramina in the outer face of the bone.

In the dentary there are forty-eight or forty-nine vertical series of teeth with four or five teeth and sometimes the stump of a sixth in each series. The individual teeth are largest at the midlength of the magazine and decrease in size toward either end of it, the posterior ones being considerably shorter but only slightly narrower than those in front. The inner enamelled tooth-surfaces, in lateral aspect, are nearly lozenge-shaped in outline, with the longer diameter vertical, and fit closely together quincuncially in a mosaic which is almost half covered from below by the thin alveolar wall. There are about 230 teeth in each dentary, this being many less than the number (406) ascribed to Diclonius mirabilis by Cope in his description of that species in 1883.

Measurements of Left Dentary of Edmontosaurus, Cat. No. 2289.

Mm.

Thickness at midlength and midheight of dental magazine.

Distance of inner edge of cutting surface of teeth, at midlength of magazine, above lower border.

Depth of bone just in advance of first vertical series of teeth.

Distance of top of coronoid process above lower border of dentary.

297

Length of dental magazine at its midheight.

366